



Model QW-400 Series

Vertical Wall Frame

Installation and Operation Manual



Manual Part No. DC30-001 Revision B

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Revision History

REVISION HISTORY

REVISION	DATE	TYPE OF MODIFICATION
A	11/9/00	Initial Release.
B	2/12/01	Added UL Mark

LIST OF EFFECTIVE PAGES

Page Number	Rev	Page Number	Rev	Page Number	Rev
i - x	B				
1 - 30	B				

Revision History

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Table of Contents

Section 1, Introduction	1
Section 2, Specifications	5
Section 3, Assembly & Installation	9
Section 4, Operation	17
Section 5, Maintenance	23

Table of Contents

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WARNING

Quantum Medical Imaging, LLC disclaims all responsibility from any injury resulting from improper application of this equipment.

This equipment is sold to be used exclusively under the prescribed direction of a person who is licensed by law to operate equipment of this nature. This equipment must be used in accordance with all safety procedures described in this manual and must not be used for purposes other than those described herein.

Quantum Medical Imaging, LLC cannot assume responsibility for any malfunctioning of this equipment resulting from improper operation, maintenance, or repair, or from damage or modification of its components.

Failure to observe these warnings may cause serious injuries.



X-RAY PROTECTION

X-rays are hazardous to both patient and operator unless established safe exposure factors and operating instructions are observed.

It is important that everyone having anything to do with x-radiation be properly trained and fully acquainted with the recommendations of the National Council on Radiation Protection and Measurements as published in NCRP Reports available from NCRP Publications, 7910 Woodmont Avenue, Suite 800, Bethesda, Maryland 20814-3095 (www.ncrp.com), and of the International Commission on Radiological Protection (www.icrp.org), and take adequate steps to protect against injury.

X-ray equipment may cause injury if used improperly. The instructions contained in this manual must be read and followed when operating this unit. Personal radiation monitoring and protective devices are available. You are urged to use them to protect against unnecessary x-ray exposure.

Safety Notices

REGULATORY COMPLIANCE

This certified Quantum Medical Imaging, LLC medical device has been designed, manufactured, and calibrated to comply with governing Federal Regulations 21 CFR Subchapter J and the performance standards attendant thereto. Upon installation, all certified products require the filing of Form FD-2579 "Report of Assembly of a Diagnostic X-Ray System" by the Assembler (i.e., the installer) with the appropriate agencies; the "Installation Quality Assurance Checklist" must also be completed and properly distributed upon installation. A copy of each form (pink copy) is provided to the user. The Installation Report is also completed by the installer and returned to Quantum Medical Imaging, LLC.

Those responsible for the planning of x-ray equipment installations must be thoroughly familiar and comply completely with NCRP Report No. 49, "Structural Shielding Design and Evaluation for Medical Use of X-Rays and Gamma Rays of Energies up to 10 MeV", as revised or replaced in the future. Those authorized to operate, test, participate in or supervise the operation of the equipment must be thoroughly familiar and comply completely with the currently established safe exposure factors and procedures described in publications such as Subchapter J of Title 21 of the Code of Federal Regulations, "Diagnostic X-Ray Systems and Their Major Components," and NCRP Report No. 102, "Medical X-Ray, Electron Beam and Gamma Ray Protection for Energies Up to 50 MeV—Equipment Design and Use" as revised or replaced in the future.

Scheduled maintenance is essential to the assurance of continued integrity of this equipment with respect to regulatory compliance. The continuance of certified performance to the regulatory standard is incumbent upon the user's diligent conformance to recommended maintenance instructions.

This product has been classified as Class I, Type B by Underwriters Laboratories, Inc. Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or with nitrous oxide.



MEDICAL ELECTRICAL EQUIPMENT
WITH RESPECT TO ELECTRIC SHOCK, FIRE,
MECHANICAL HAZARDS ONLY
IN ACCORDANCE WITH CAN/CSA C22.2 NO. 601.1
98YA



MEDICAL ELECTRICAL EQUIPMENT
WITH RESPECT TO ELECTRIC SHOCK, FIRE,
MECHANICAL HAZARDS ONLY
IN ACCORDANCE WITH UL 2601-1
98YA

The following symbols may be used for marking on this equipment or equipment documentation:



Earth (ground)



Type B equipment



Protective Earth (ground)



Attention, consult accompanying documents

NOTE

Form FD-2579 is required for U.S. installations; please observe the applicable regulations of your particular local and/or national agencies.


Warranty Information

WARRANTY STATEMENT

Quantum Medical Imaging, LLC (herein known as "QMI") warrants to buyer that any new product manufactured by QMI will be free from defects in material and manufacturing and conform substantially to applicable specifications in effect on the date of shipment when subjected to normal, proper and intended usage by properly trained personnel.

All QMI products shall be warranted for a period of 12 months from the time of original installation, the date of which will be determined by a completed, returned warranty card, which must be returned within 30 days of system installation. In no case shall the warranty exceed 15 months from the date of shipment. If the warranty card is not returned to QMI, then the warranty shall take effect 12 months from the date of shipment by Quantum Medical Imaging. Buyers should complete one (1) form per system or component, if items are ordered separately.

WARRANTY CARD

Cut along dashed line 

Name of Owner _____		
Name of Facility _____		
Address 1 _____		
Address 2 _____		
City _____		State _____
Country _____		Zip _____
Phone _____		
e-mail _____		
Name of Distributor _____		
Installation Date _____		
Check Type of Equipment and Provide ID No.'s:		
	<u>Model No.:</u>	<u>Serial No.:</u>
<input type="checkbox"/> Hi-Freq. Generator	_____	_____
<input type="checkbox"/> Table	_____	_____
<input type="checkbox"/> Collimator	_____	_____
<input type="checkbox"/> HI-Tension Cable	_____	_____
<input type="checkbox"/> Tube	_____	_____
<input type="checkbox"/> Tube Stand	_____	_____
<input type="checkbox"/> Wall Stand	_____	_____
<input type="checkbox"/> Other	_____	_____

Fill in and mail above card promptly to:

Quantum Medical Imaging, LLC
2905 Veterans Memorial Highway
Ronkonkoma, N.Y. 11779 USA

Warranty Information

WARRANTY STATEMENT (Continued)

Any component furnished without charge to Buyer/Dealer during the warranty period to correct a warranty failure shall be warranted only to the extent of the unexpired term of the warranty of the original product. This warranty extends only to the original purchase and is not transferable unless authorized in writing by Quantum Medical Imaging.

Products manufactured by parties other than QMI, where QMI acts solely as distributor or reseller, will carry their respective manufacturers' warranties.

Warranty consideration will be given only for defective QMI products properly returned to the factory in accordance with QMI's warranty return procedure (refer to Dealer Price Book or contact Quantum Medical Imaging, LLC. customer service).

WARRANTY EXCLUSIONS

The foregoing warranties are exclusive and in lieu of all other warranties, whether written, oral, express, implied or statutory. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE SHALL APPLY. QMI Warranty is exclusive of:

- 1) Failure of Buyer/Dealer to prepare the site or provide power requirements or operating environmental conditions in compliance with any applicable instructions or recommendations of Quantum Medical Imaging.
- 2) Failure of Buyer/Dealer to provide the proper incoming power required to support the equipment in accordance with the recommendation of QMI.
- 3) Any modification of product performed by a party other than Quantum Medical Imaging.
- 4) Combining incompatible products.
- 5) Improper or extraordinary use of the Product, improper maintenance of the Product, or failure to comply with any applicable instructions or recommendations of Quantum Medical Imaging.
- 6) Misuse, tampering or, negligent storage/handling of the Product by Buyer, its employees, agents or contractors.
- 7) Fuses and other items deemed by QMI to be expendable.
- 8) Acts of God, acts of civil or military authority, fires, floods, power failure or electrical power surges, strikes or other labor disturbances, war riots or other causes beyond the reasonable control of Quantum Medical Imaging.
- 9) Installation, troubleshooting or repair service are not included in this warranty. Technical service and maintenance is the responsibility of the dealer selling the equipment.
- 10) The Manufacturer is relieved of any responsibility for damage during shipment after the freight carrier transports the unit for delivery.

BUYER'S REMEDIES

If Quantum Medical Imaging determines that any Product fails to meet any warranty during the applicable warranty periods, Quantum Medical Imaging shall correct any such failure as follows:

- A) By repairing, adjusting, or replacing any defective or non-conforming Parts or Products.
- B) By making available any necessary repaired or replacement parts or assemblies.

Quantum Medical Imaging shall have the option to furnish either new or exchange replacement parts or assemblies. All returned parts shall become the property of Quantum Medical Imaging.

The preceding Paragraphs set forth Buyer's Remedies and Quantum Medical Imaging's sole liability for claims based upon failure of the product to meet any warranty, whether the claim is on contract, warranty, Tort (including negligence and strict liability) or otherwise, and however instituted. And upon the expiration of the applicable warranty period, all such liability shall terminate. In no event shall Quantum Medical Imaging be liable for special or consequential damages.

The warranties and remedies available to the buyer are conditioned upon all claims under this warranty being made in accordance with the aforementioned warranty statement.

Warranty Information

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Chapter

1

INTRODUCTION



OVERVIEW

NOTE

The user should read this manual in its entirety prior to using this equipment. It should be kept in a location near the equipment and readily accessible to the those that operate it.

This manual provides information for installing, operating, and maintaining Quantum Medical Imaging's Vertical Wall Frame, Model QW-400 (hereinafter referred to as the Vertical Wall Frame). It is imperative that all safety procedures described in this manual be strictly adhered to in order to ensure the safety of both patient and user. The key features of the Vertical Wall Frame are as follows:

- Accommodates all upright exams: 45.5 inches (1155.7 mm) image receptor travel with 14" x 17" image receptor, 21.5 inches (546.1 mm) image receptor travel with 14" x 36" image receptor
- Fail-safe electromagnetic locks for image receptor
- Easy installation

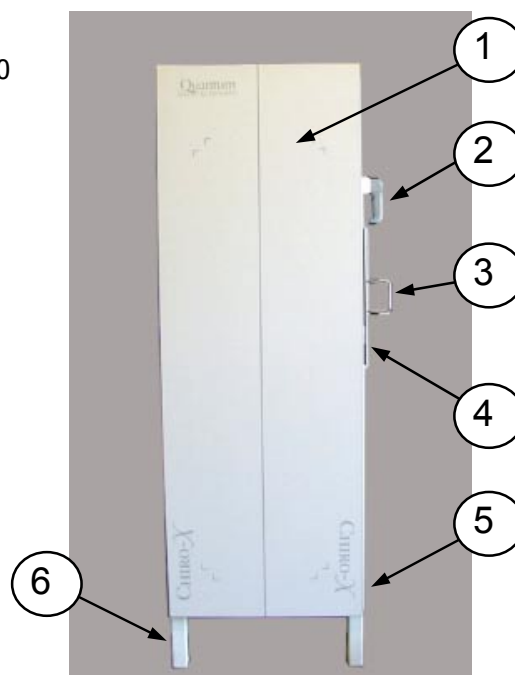
INTENDED USE

The Vertical Wall Frame, Model QW-400, is intended for use as a wall-mounted radiographic cassette holder that holds and positions a radiographic cassette for a radiographic exposure.

MAIN COMPONENTS

See Figure 1. The Model QW-400 Vertical Wall Frame contains:

- 1 Front Cover (phenolic)
- 2 Hand Control
- 3 Cassette Tray Handle
- 4 Receptor Cabinet
- 5 Compliance Label
- 6 Legs



**Figure 1. Vertical Wall Frame,
Model QW-400 Series**

Chapter 1 Introduction

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Chapter

2

SPECIFICATIONS



PHYSICAL SPECIFICATIONS

The following are physical specifications for the Vertical Wall Frame:

Frame Dimensions

- Height (total): 85.0 inches (2159.0 mm)
- Height (excluding legs): 78.0 inches (1981.2 mm)
- Width: 26.5 inches (673.1 mm)
- Depth: 6.59 inches (167.4 mm)

Other Specifications

- Film Cabinet Front Cover Material Type: Fiber Resin (phenolic)
- Density of Front Cover Material: <1.0 mm Al
- Receptor Types: 14 x 17 fixed grid, 14 x 17 bucky
14 x 36 fixed grid, 14 x 36 bucky
- Weight: approx. 100 lbs. (45.7 kg)

PERFORMANCE SPECIFICATIONS

The following are performance specifications for Vertical Wall Frame:

Image Receptor Travel Specifications

- Vertical Travel (with 14" x 17" image receptor): 42.5 inches (1080.0 mm)
- Vertical Travel (with 14" x 36" image receptor): 22.5 inches (570.0 mm)

Electrical Specifications

- Mode of Operation: Continuous
- Locking System Type: Electromagnetic, Fail-Safe
- Locking System Power: 24 VDC, 0.5A

Note: Systems equipped with a Bucky require separate 120/220-240 VAC power supply

Chapter 2 Specifications

- Power Supply Type: Double (or Reinforced) Insulated (must meet construction/performance criteria per UL 2601-1)

System Operating Environment

- Ambient Temperature: +10°C to +40°C
- Relative Humidity: 20 to 80%, non-condensing
- Altitude: -30.5 to +2440 meters relative to sea level

Non-Operating Environment

- Ambient Temperature: -18°C to +70°C
- Relative Humidity: 20 to 95%, non-condensing
- Altitude: -30.5 to +3048 meters relative to sea level

COMPATIBILITY STATEMENT

The Quantum Medical Imaging, LLC Vertical Wall Frame is compatible with all Quantum Medical Imaging, LLC manufactured tube stands and high-voltage x-ray generators.

Chapter

3

ASSEMBLY & INSTALLATION



OVERVIEW

This chapter describes the steps required to assemble the Vertical Wall Frame and how to install the completed assembly in your facility, including making all required electrical connections.

NOTE

Examine all cartons and crates carefully at time of delivery. If damage is apparent, have delivery driver write a "Damaged Shipment Note" on copies of freight bill, sign it, and file appropriate carrier claim. Should you discover concealed damage, immediately notify the transporting agent and ask for an "Inspection of Damage". Carrier will not accept concealed damage claim if filed after 15 days from date of receipt of merchandise.

REQUIRED TOOLS AND MATERIALS

The following tools and materials are required to complete the assembly and installation procedures:

- Socket Wrench Set
- Assorted Phillips and slot blade screwdrivers
- Drill (and masonry bit if concrete construction)
- Bubble level

UNPACKING

The Vertical Wall Frame is shipped in separate shipping containers as follows:

- Wall Frame Assembly
- Image Receptor Cabinet
- Manual, hardware bag, etc.

Open the crate or carton marked "packing list enclosed" first. Locate and remove the packing list. Use the list as a guide to opening remaining cartons. Do not dispose of packing material until packing list is matched with actual parts received. If any damaged parts are found, notify the shipping or freight company immediately (the manufacturer is relieved of any responsibility for damage during shipment after unit is picked up by the carrier). Should there be a shortage of parts, notify Quantum Medical Imaging's Service Department.

Chapter 3 Assembly & Installation

ASSEMBLY INSTRUCTIONS

To assemble the Vertical Wall Frame, refer to Figures 2 through 4.

1. Lift off the fiber-resin (phenolic) Front Cover from the Wall Frame.
2. Typically the Receptor Cabinet is pre-installed into the Wall Frame at the factory. However, instructions for assembly and installation of the Receptor Cabinet are provided in steps 2a through 2k if needed for service or replacement purposes:
 - a. Place the Receptor Cabinet on a flat surface with front side facing up, top end away, and bottom end toward you.
 - b. Loosely install the two (2) Spring-Loaded Bearing Brackets on the top and bottom non-film loading side of the Receptor Cabinet using two (2) 1/4-20 x 3/4" screws on each bracket.
 - c. Loosely install Bearing Bracket (without spring), part number ME10-013, on the bottom film-loading side of the Receptor Cabinet using two (2) 1/4-20 x 3/4" screws.
 - d. Loosely install Bearing Bracket (without spring), part number ME20-014, and Control Handle Mounting Bracket (part number ME20-012) on the top film-loading side of Receptor Cabinet using two (2) 1/4-20 x 3/4" screws.
 - e. Install Receptor Cabinet by sliding it onto Bearing Rails in the Wall Frame.



Figure 2. Receptor Cabinet Installed in Wall Frame

- f. The slotted mounting holes in the Bucky Bearing Brackets are provided to adjust tension on bearings (wheels). When adjusted properly, the wheels on all four brackets should rotate throughout the entire travel distance of the Receptor Cabinet.
 - g. Slide Receptor Cabinet all the way down to bottom of Wall Frame.
 - h. Lift the counterweight so that the Pulley Cables slip over the Pulleys.
 - i. Secure the Pulley Cables to two top Bucky Bearing Brackets on Receptor Cabinet using 1/4-20 x 1" hex head bolts and flat washers.
 - j. Slowly allow the counterweight to pull Receptor Cabinet to top of Wall Frame.
 - k. Check bumper stops making sure that the Receptor Cabinet does not contact Wall Frame.
3. Install the Control Handle with bracket to right side Bucky Bearing Bracket (for right-hand film loading) or left side Bucky Bearing Bracket (for left-hand film loading).

Chapter 3 Assembly & Installation

4. Connect the black coil cable wires to Terminal Board TB1 terminals 2 and 3 as shown in Figure 3.
5. On systems configured for right-hand film loading, tie-wrap coil cord cable as shown in Figure 4.
6. On systems configured for left-hand film loading, tie-wrap coil cord cable as shown in Figure 5.
7. Re-attach the Front Cover on the Wall Frame.

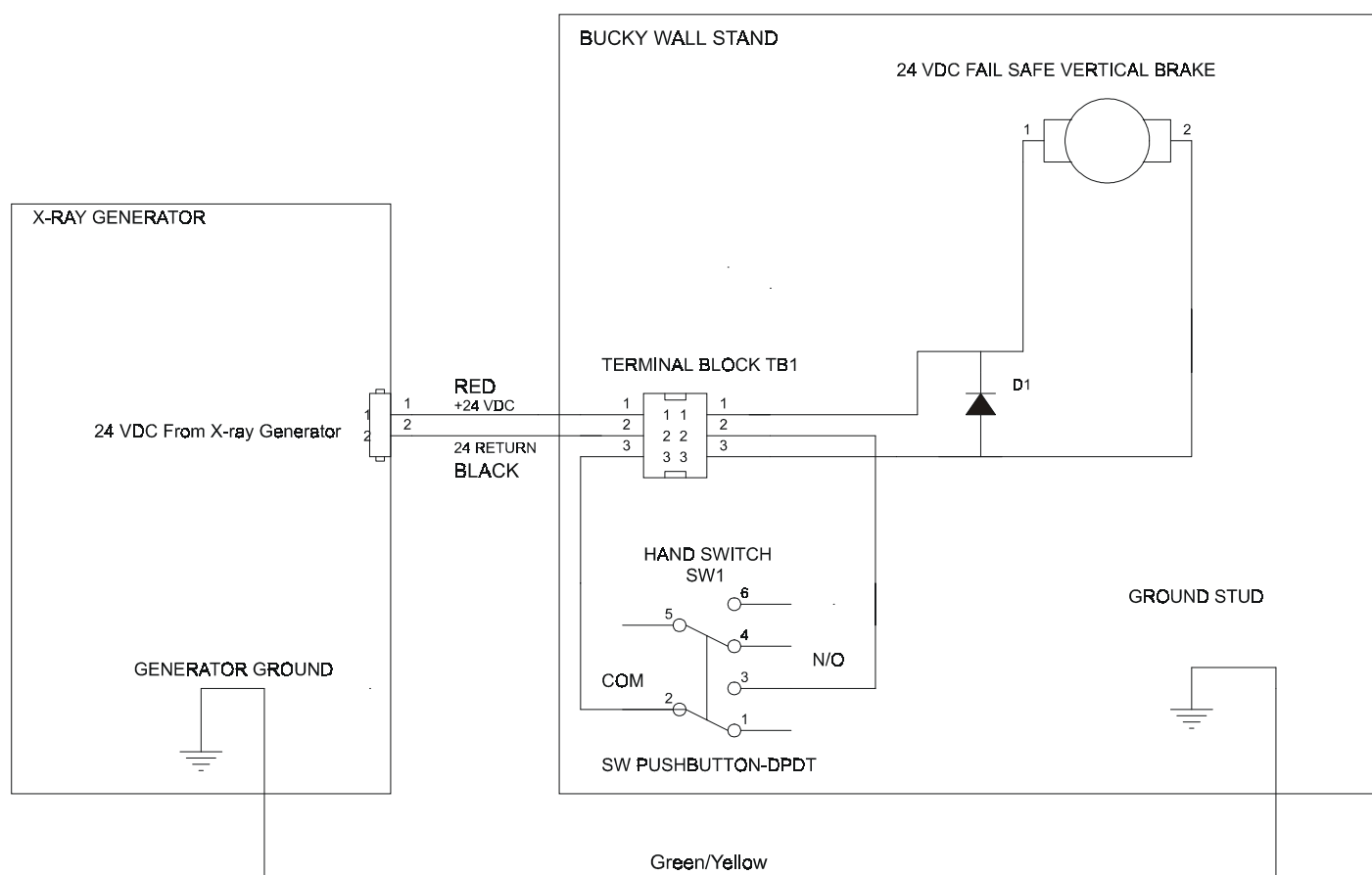


Figure 3. Model QW-400 Electrical Wiring Diagram

Chapter 3 Assembly & Installation

4. Connect the black coil cable wires to Terminal Board TB1 terminals 2 and 3 as shown in Figure 3.
5. On systems configured for right-hand film loading, tie-wrap coil cord cable as shown in Figure 4.
6. On systems configured for left-hand film loading, tie-wrap coil cord cable as shown in Figure 5.
7. Re-attach the Front Cover on the Wall Frame.

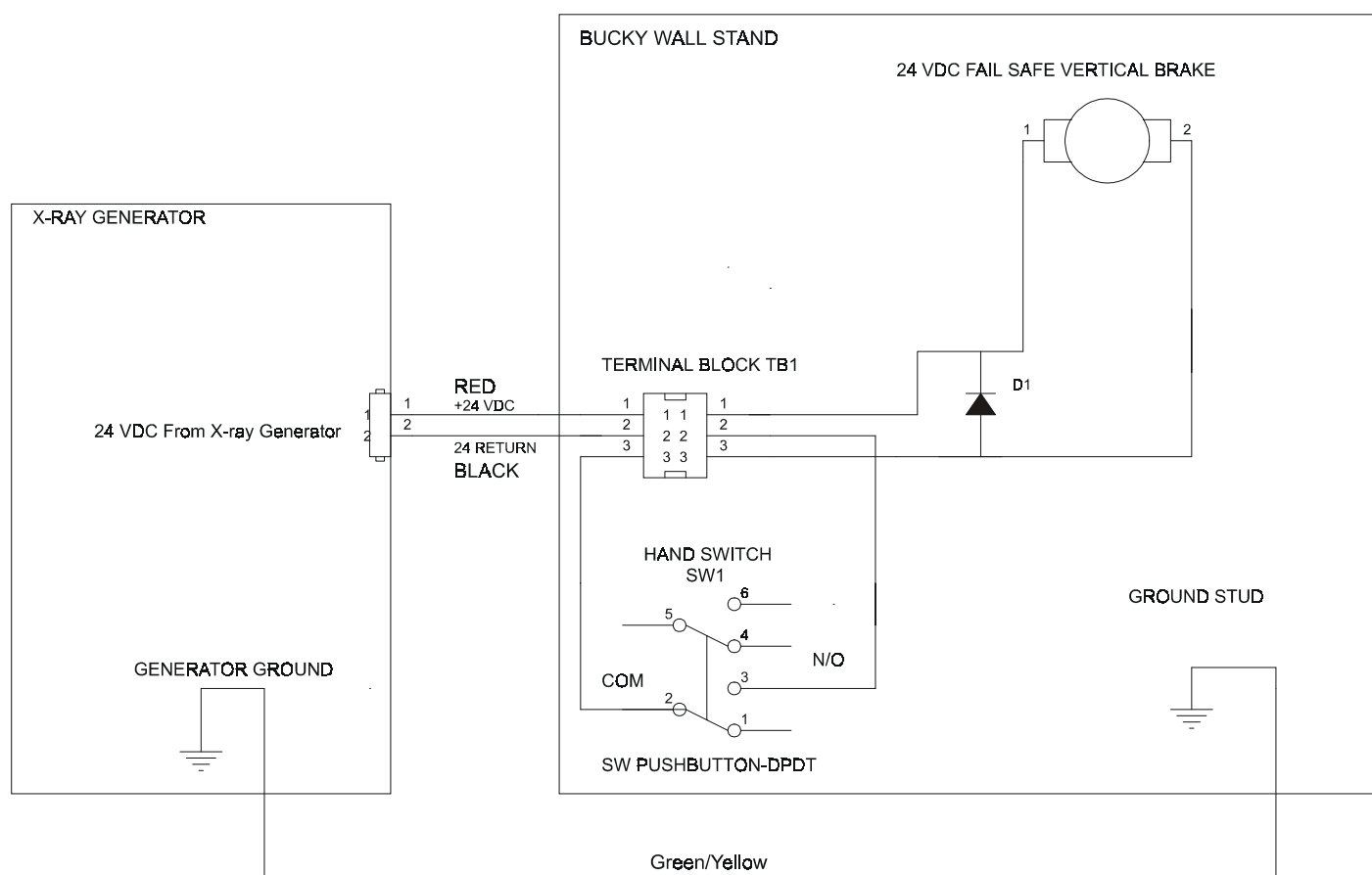


Figure 3. Model QW-400 Electrical Wiring Diagram

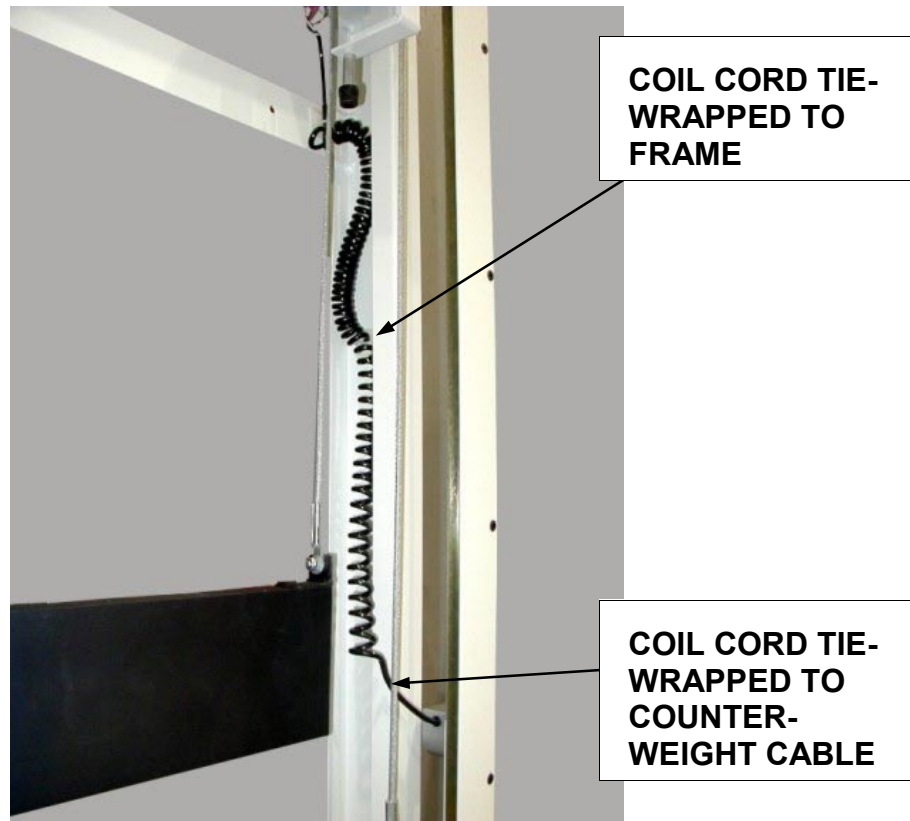


Figure 4. Coil Cord Cable Routing (Right Hand Load Systems)

Chapter 3 Assembly & Installation

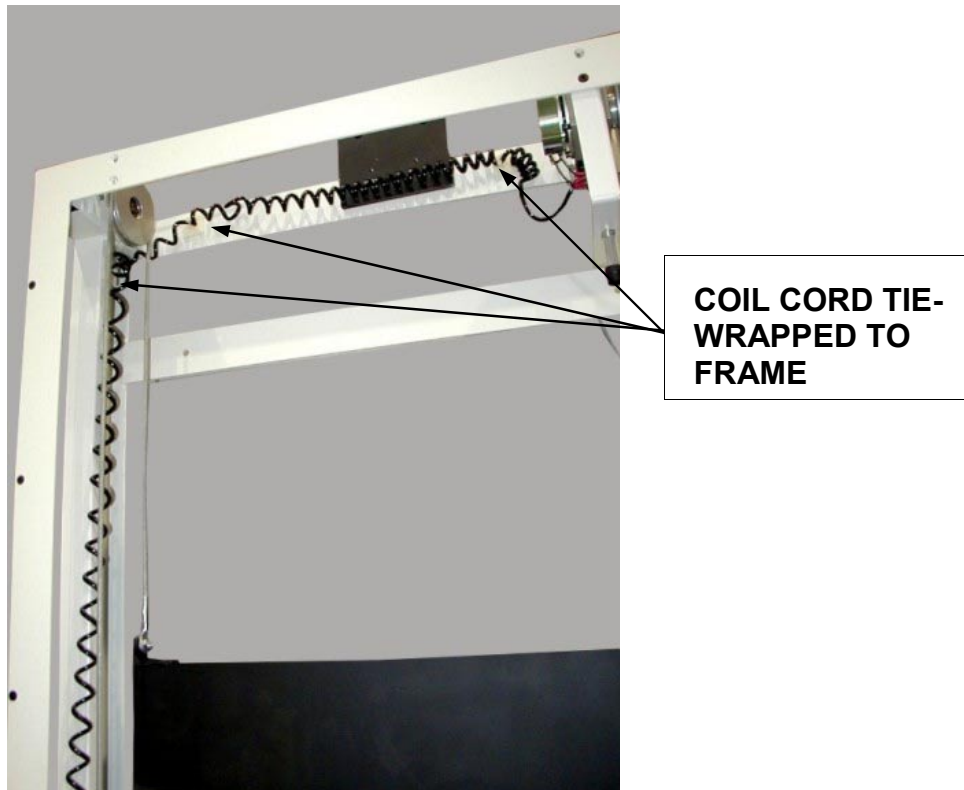


Figure 5. Coil Cord Cable Routing (Left hand Load Systems)

INSTALLATION INSTRUCTIONS

1. Stand the Vertical Wall Frame against wall in proper position. Level Vertical Wall Frame front-to-back and left-to-right using bubble level (use shims to level left-to-right, as necessary).
2. Turn on collimator light.
3. Align the collimator cross-hair lines to the center line on the Front Cover of the Vertical Wall Frame. Adjust position of Vertical Wall Frame as required.
4. Drill holes in the floor using the holes in the Vertical Wall Frame's floor mounting bracket as a guide.

Chapter 3 Assembly & Installation

5. Secure the Wall Frame to the floor through the Floor Mounting Brackets using the appropriate hardware for floor construction (must be capable of supporting 100 lbs. pull-load) as shown in Figure 6.

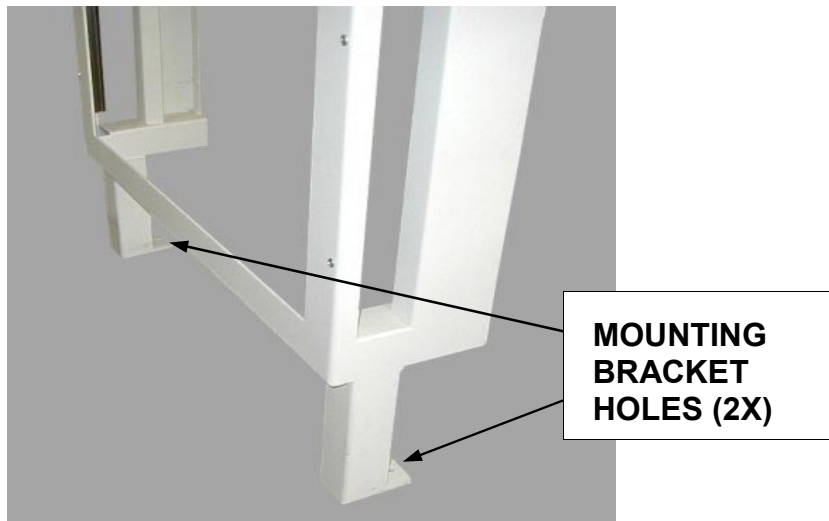


Figure 6. Vertical Wall Frame Floor Mounting Brackets

6. Remove Front Cover from the Wall Frame.
7. Secure the Vertical Wall Frame to the wall through mounting plate in rear of Wall Frame using appropriate hardware (must be capable of supporting 60 lbs. pull-load).

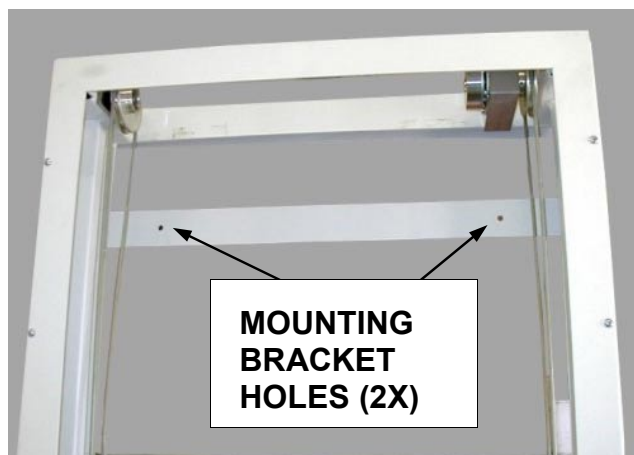


Figure 7. Vertical Wall Frame Wall Mounting Bracket

Chapter 3 Assembly & Installation

8. Connect red and black wires from a double (or reinforced) insulated 24 VDC power source (must meet construction/performance criteria per UL 2601-1) to Terminal Board TB1 terminals 1 and 2, respectively (see Figure 3). Use cable ties, as required, to manage cable.
9. If using a moving grid (bucky), connect bucky power cable to terminal block on bucky (refer to bucky manufacturer's documentation, provided with system, for specific wiring instructions). Use cable ties to secure bucky cable along top of Receptor Cabinet and to Control Handle Coil Cable (leave a service loop to enable full travel of Receptor Cabinet).
10. Remove grid. Insert cassette into tray in Receptor Cabinet.
11. Move Receptor Cabinet to top of Wall Frame. Make sure that the Fail-Safe Brake is de-energized by pressing the LOCK RELEASE button on the control handle attached to the Receptor Cabinet. This must be done anytime the Receptor Cabinet is to be moved.
12. Line up the image receptor with collimator light field.
13. Tighten Bucky Bearing Brackets slightly.
14. Move Receptor Cabinet to the bottom of the Wall Frame.
15. Re-check alignment of the image receptor with the collimator light field.
16. Ensure that control handle coil cable remains in Wall Frame groove. Check smoothness of Receptor Cabinet travel. Adjust Bucky Bearing Brackets if necessary.
17. Fully tighten the Bucky Bearing Brackets.
18. Install grid.
19. Take projection into cassette for verification of compliance. (Refer to Collimator Manual).
20. Re-attach Front Cover to Wall Frame Assembly.
21. Ground the Vertical Wall Frame by connecting ground wire from system ground to the ground stud located on the left leg (rear side) of the Wall Frame Assembly.

POST INSTALLATION CHECK

All mounting procedures must be approved before, and checked after, installation by the hospital or facility engineering department and a registered, professional, structural engineer. It is recommended that a leakage current measurement be taken following installation to verify system meets allowable levels.

Chapter

4

OPERATION



VERTICAL WALL FRAME OPERATION

Operation of the Vertical Wall Frame involves moving the Receptor Cabinet (film holder) vertically (i.e., up or down). This is accomplished by depressing the Receptor Cabinet **Lock Release Button** (see Figure 8), located on the control handle attached to the Receptor Cabinet, and then moving the cabinet to the desired vertical position. Releasing the Receptor Cabinet **Lock Release Button** locks the cabinet in its new position.



WARNING! All movable assemblies and parts of this equipment must be operated with reasonable care. Do not place hands or fingers in the openings along the sides of the Cassette Holder's frame. Injury to the hands and/or fingers is possible.

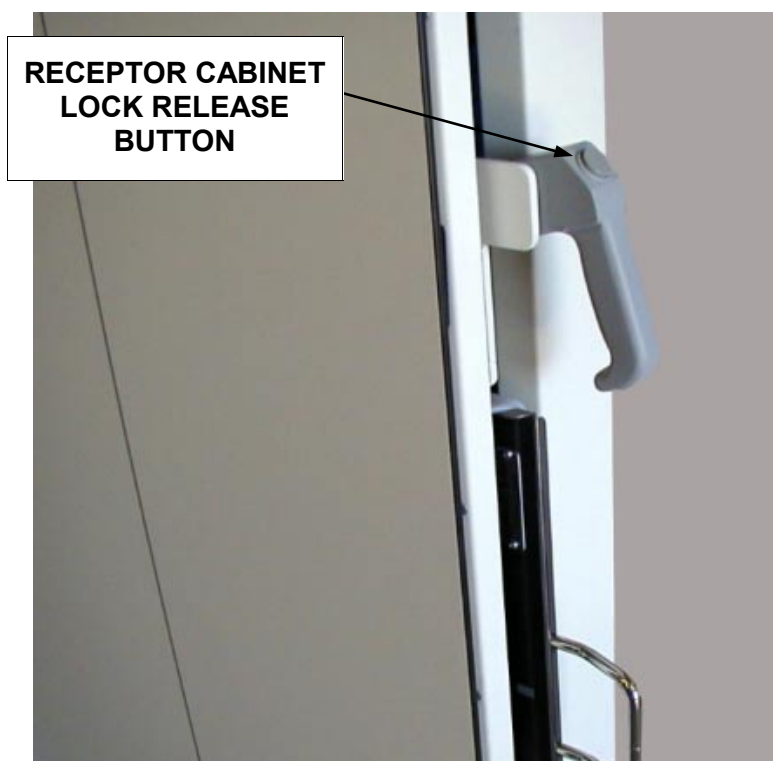


Figure 8. Receptor Cabinet Lock Release Button

Chapter 4 Operation

CASSETTE TRAY OPERATION

The Vertical Wall Frame is equipped with either a Midwest or Poersch cassette tray, depending on the system ordered. The following paragraphs describe the operating instructions for each. Additional information is contained in the cassette tray manufacturer's documentation, which is shipped with the wall frame.

Loading Cassette Tray (Midwest Type)

To load a film cassette into a "Midwest" type cassette tray, proceed as follows:

1. Pull cassette tray from Receptor Cabinet using tray handle (see Figure 9).

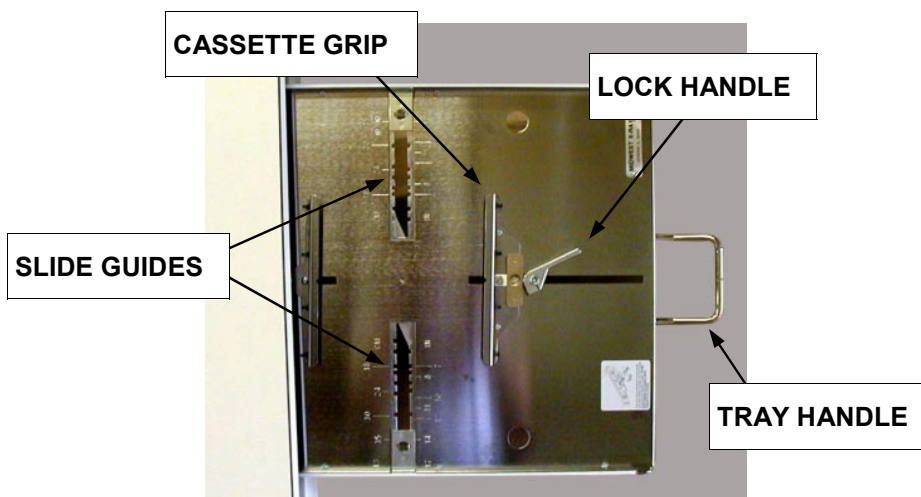


Figure 9. Midwest Cassette Film Tray

2. Pull back on front cassette grip (opens both grips).
3. Position slide guides ("L" brackets seated in channels) to cassette size using indicators on cassette tray (press center brass button to allow movement).
4. Insert cassette into tray (back end first).
5. Lock cassette into tray.
6. Push front grip against cassette.
7. While pushing front grip against cassette, turn cassette lock handle to lock position.

8. Push tray into Receptor Cabinet. The cassette is now in exposure position.

Loading Cassette Tray (Poersch Type)

To load a film cassette into a "Poersch" type cassette tray, proceed as follows:

1. Pull cassette tray from Receptor Cabinet using tray handle (see Figure 10).

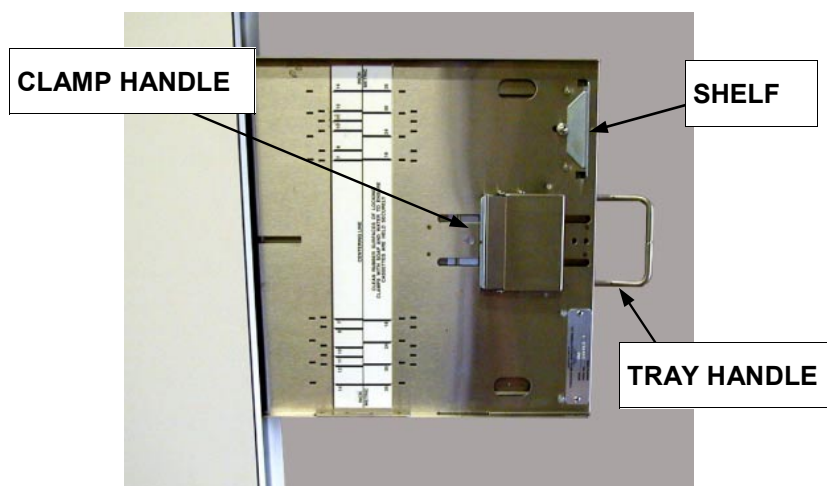


Figure 10. Poersch Cassette Film Tray

2. Remove shelf from retainer by rotating flange forward.
3. Place shelf in holes required for size of film cassette.
4. Place cassette on shelf (back end first). Lift handle of clamp.
5. Slide clamp forward pushing clamp firmly against cassette.
6. While pushing clamp against cassette, press clamp handle down.

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Chapter

5

MAINTENANCE



OVERVIEW

The Vertical Wall Frame will function reliably when maintained according to the instructions provided in this chapter.



WARNING! Only properly trained service personnel should service or maintain this equipment. Failure to follow manufacturer's or service personnel's recommendations may result in serious injury.

USER MAINTENANCE



CAUTION! Never use abrasive polish on this equipment.

The equipment user is responsible for the basic cleanliness of the equipment. On a regular basis, the Vertical Wall Frame's Front Cover surface should be wiped clean. Painted metal surfaces should be cleaned using a clean cloth slightly moistened in warm soapy water (use mild soap). Wipe with a clean wet cloth.

PLANNED MAINTENANCE

Routine inspection and maintenance of the Vertical Wall Frame should be performed by qualified service personnel on an annual basis.



WARNING! Personnel engaged in maintenance activities should exercise normal caution and care while working with electro-mechanical equipment. Before removing or opening any electrical power panels or covers, verify that the incoming power supply is turned OFF. In the event maintenance procedures require power to be supplied to the unit, extreme care MUST be exercised to insure the safety of service or other personnel in the area. Verify that the equipment is properly grounded before attempting any electrical operation.

Chapter 5 Maintenance

A complete series of inspections and functional checks was conducted at the time of installation to insure proper operation of the system. The following inspection and adjustment procedures are recommended to maintain the system in its original operating condition.

- Check for evidence of loose hardware or loose wires.
- Verify that all ground conductors are properly and securely installed and free of corrosion or damage.
- Check all electrical cabling and wiring for wear and fraying.
- Check all bearings and bearing surfaces for cleanliness and corrosion.
- Conduct a general inspection for worn or damaged parts.
- Visually inspect for wear and cleanliness.

REPLACEMENT PARTS AND ORDERING INFORMATION

Table 1 below provides a list of replaceable parts for the Vertical Wall Frame. See Figures 11 and 12 for locations of replaceable parts.

Table 1. Replaceable Parts

ITEM	DESCRIPTION	PART NUMBER	QTY USED IN SYSTEM
1	Fail-Safe Brake	EL80-002	1
2	12" Control Handle Retractable Coil Cord	EL75-001	1
3	24-Volt Power Cable	EL75-004	25 feet
4	Receptor Bearing Guides	ME30-008	4
5	Front Cover (Phenolic)	ME31-004	1
6	Gray Pushbutton Switch	EL50-002	1

Chapter 5 Maintenance

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5	Front Cover (Phenolic)	ME31-004	1
6	Gray Pushbutton Switch	EL50-002	1

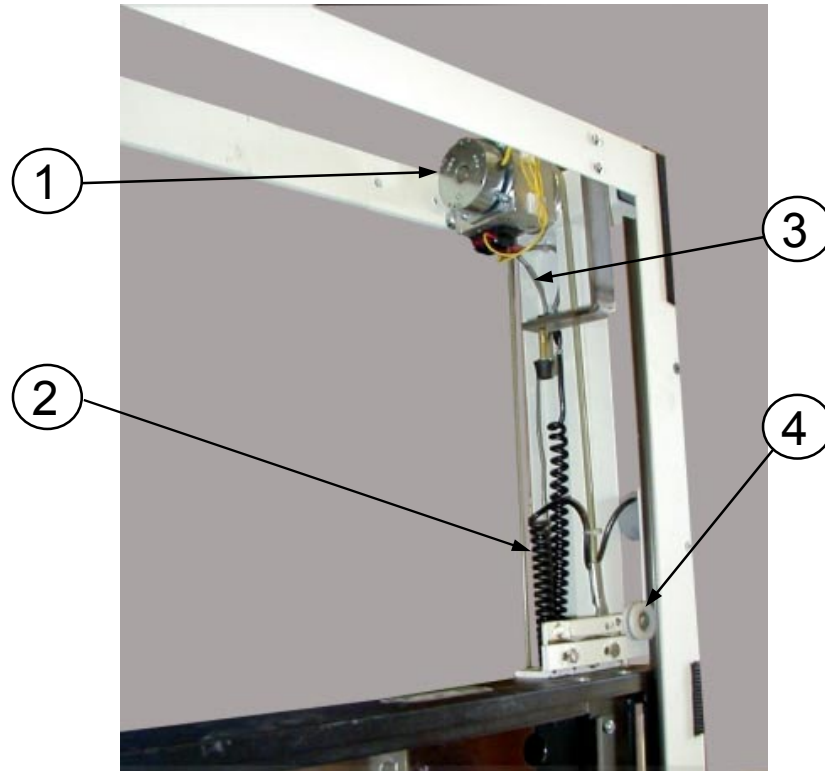


Figure 11. Model QW-400 Vertical Wall Frame Parts Location Diagram

ORDERING INFORMATION

To order replacement parts for the Vertical Wall Frame, contact the Service Department at:

Quantum Medical Imaging, LLC
2905 Veterans Memorial Highway
Ronkonkoma, New York 11779 USA
Phone: (631) 587-5800

When ordering replacement parts, supply the following information:

- Model and serial number of equipment
- Part number
- Part description
- Quantity required

When ordering components or parts not listed in Table 1, a complete description of the part, including its function and location should be provided with the model number and serial number of the unit.

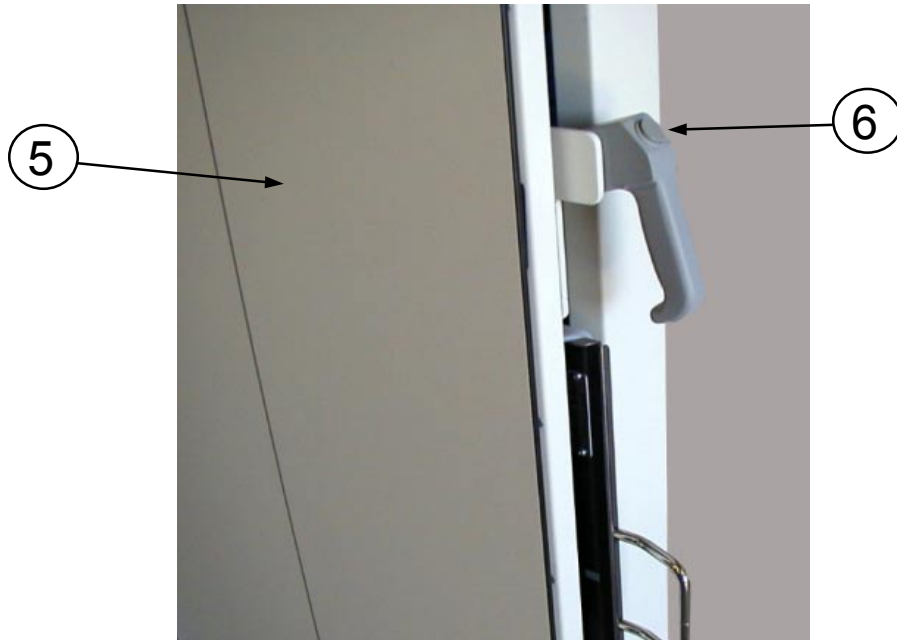


Figure 12. Model QW-400 Vertical Wall Frame Parts Location Diagram